



UNIVERSITI PUTRA MALAYSIA

**THE IMPACT OF NETWORK RELATIONSHIPS ON SMEs'
INTERNATIONALIZATION PROCESS: A CASE STUDY OF
MALAYSIAN FIRMS**

NG SIEW IMM

GSM 2002 1

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INTERNATIONALIZATION PROCESS: A CASE STUDY OF MALAYSIAN
FIRMS**

By

NG SIEW IMM

**Paper Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Science in the Graduate School of Management
Universiti Putra Malaysia**

November 2002



Abstract of thesis submitted to the Senate of Universiti Putra Malaysia in partial fulfillment of the requirements for the degree of Master of Science

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Chairman: Zulkarnain Yusop, Ph.D.

Faculty: Economics and Management

Today most business activities are global in scope. A firm that fails to make a global profit may well go out of business. Therefore, more and more Malaysian firms are striving to have an international presence. But when firms decided to explore international market, they begin to face a lot of challenges that require them to take strategic decisions. Therefore, this study intended to look into how indigenous software firms use their network relationships to facilitate their internationalization process.

This research used a multi-site case study methodology to more effectively identify and understand detailed international growth patterns and processes. Three respondent software firms were randomly selected from MSC (Multimedia Super Corridor) status SMEs (Small Medium-sized Enterprises). On top of that, a manufacturing firm was conveniently selected to compare differences on network relationships' influence on its internationalization process with those of

manufacturing firms. In each case, upper level managers were interviewed. Information was also collected from printed documents or Internet to increase source validity.

In summary, the evidences from the three software firms were found to support the firms' internationalization process in the following:

- ♦ Network relationships trigger international opportunity.
- ♦ Network relationships motivate firms to internationalize.
- ♦ Network relationships influence firms' market selection decision.
- ♦ Network relationships influence firms' entry mode decision.
- ♦ Network relationships allow firms' to access additional relationships.
- ♦ Network relationships allow firms' to access established channel.
- ♦ Network relationships help lower cost and minimize risk.
- ♦ Network relationships influence firms' internationalization pace and pattern.

Therefore, managers need to have a better understanding of the impact of network relationships on firms' internationalization process as it facilitates their internationalization process through the above.

A limitation of this study is that it focused on a single sector, software development firm, with only a manufacturing firm taken for comparison. It would be inappropriate to generalize the results too widely. Although case research provides a richness and depth of understanding, to enhance the qualitative approach, it is suggested that a quantitative research is adopted in future research to enhance or further reinforce the findings.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian keperluan untuk ijazah Master Sains

**PENGARUH PERHUBUNGAN RANGKAIAN KE ATAS PROSES
PENGANTARABANGSAAN SME: SATU KAJIAN KES FIRMA DI
MALAYSIA**

Oleh

NG SIEW IMM

November 2002

Pengerusi: Zulkarnain Yusop, Ph.D.

Fakulti: Ekonomi dan Pengurusan

Pada masa kini, kebanyakan aktiviti perniagaan didapati dijalankan di peringkat antarabangsa. Firma yang gagal mengaut keuntungan di peringkat antarabangsa besar kemungkinan terpaksa menggulung tikar. Semakin banyak firma Malaysia sedang mencuba nasib untuk mencatat nama di peringkat antarabangsa. Namun, bila firma ingin meneroka peluang antarabangsa, mereka mula berhadapan dengan pelbagai dugaan, yang memerlukan mereka membuat keputusan yang strategik. Dengan itu, thesis ini bertujuan untuk melihat bagaimana firma menggunakan perhubungan rangkaian antarabangsa, untuk membantu mereka dalam proses pengantarabangsaan.

Thesis ini menggunakan cara kajian kes untuk mengenalpasti dan memahami proses pengantarabangsaan firma dengan lebih terperinci. Tiga firma SME (Industri kecil and sederhana) yang bertaraf MSC (Multimedia Super Corridor) telah dipilih secara rawak sebagai responden. Selain itu, sebuah kilang pengeluaran barangan telah dipilih sebagai responden untuk membandingkan perbezaan impak perhubungan rangkaian ke atas proses pengantarabangsaan firma. Dalam setiap firma, pengurus

atasan firma telah ditemuduga. Dokumen yang berkaitan juga telah dikutip dari firma berkenaan atau dari internet.

Bukti-bukti dari respondent firma perisian telah didapati menyokong proposisi proses pengantarabangsaan yang berikut:

- Perhubungan rangkaian firma menyalurkan maklumat tentang peluang perniagaan antarabangsa kepada firma.
- Perhubungan rangkaian firma memberi motivasi kepada firma untuk mengantarabangsakan perniagaannya.
- Perhubungan rangkaian firma mempengaruhi keputusan firma dalam memilih pasaran antarabangsa.
- Perhubungan rangkaian firma mempengaruhi keputusan firma dalam memilih saluran pemasaran antarabangsa.
- Perhubungan rangkaian firma membolehkan firma menjalin perhubungan tambahan di peringkat antarabangsa.
- Perhubungan rangkaian firma membolehkan firma menggunakan saluran sedia ada di peringkat antarabangsa.
- Perhubungan rangkaian firma membantu menjimatkan kos and mengurangkan risiko.
- Perhubungan rangkaian firma mempengaruhi corak dan kelajuan firma dalam mencapai pengantarabangsaan perniagaannya.

Oleh itu, pengurus haruslah memahami impak perhubungan rangkaian kepada proses pengantarabangsaan perniagaannya kerana ia membantu proses pengantarabangsaan firma mereka seperti yang terhurai di atas.

Limitasi kepada kajian ini adalah ia hanya fokus kepada satu sector; firma perisian sahaja, dan hanya sebuah firma pengeluaran diambil untuk perbandingan. Maka, ia tidak sesuai untuk membuat generalisasi yang luas. Walaupun kajian kes membekalkan pemahaman yang kaya dan mendalam kepada kita, adalah dicadangkan bahawa kaedah kuantitatif dijalankan pada kajian akan datang untuk meningkatkan mutu kajian.

ACKNOWLEDGEMENTS

I would like to express my gratitude to my supervisors, Prof Dr Mohd Zain Mohammed, Assoc Prof Dr Nazari Ismail, and Dr Zulkarnain Yusop for their invaluable guidance, teachings and advice given to me in the preparation and writing of this thesis. Without their ideas and concern, I would certainly have encountered much difficulty during the researching and writing of this thesis.

My appreciation also goes to all the respondent case firms that have contributed their time and effort in providing me the information needed to complete this thesis.

Lastly, I would like to thank my family for their supports and encouragements, in completing my Master of Science.

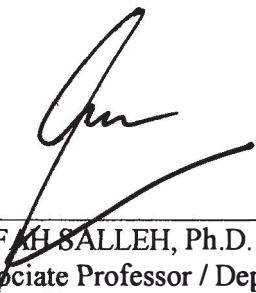
I certify that an Examination Committee met on 5th November 2002 to conduct the final examination of Ng Siew Imm on her Master of Science thesis entitled “The Impact of Network Relationships on SMEs’ Internationalization Process: A Case Study of Malaysian Firms” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The committee recommends that the candidate be awarded the relevant degree. Members of the examination committee are as follows:

Azizi Ali Ibrahim, Ph.D.
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Zulkarnain Yusop, Ph.D.
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Mohd. Nazari Ismail, Ph.D.
Associate Professor
Faculty of Business and Accounting
Universiti Malaya
(Member)

Mohd. Zain Mohamed, Ph.D.
Department of Business Administration
College of Business and Economics
UAE University
United Arab Emirates
(Member)



ARFAH SALLEH, Ph.D.
Associate Professor / Deputy Dean
Graduate School of Management
Universiti Putra Malaysia

Date: 29/1/03

This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as partial fulfillment of the requirement for the degree of Master of Science.

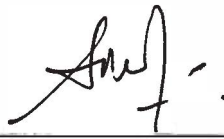


ZAINAL ABIDIN KIDAM
Associate Professor / Dean
Graduate School of Management
Universiti Putra Malaysia

Date: 29 / 1 / 03

DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.



NG SIEW IMM

Date: Jan 4, 2003

TABLE OF CONTENTS

	Page
ABSTRACT	ii
ABSTRAK	iv
ACKNOWLEDGEMENT	vii
APPROVAL SHEETS	viii
DECLARATION FORM	x
LIST OF TABLES	xiv
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
 CHAPTER	
 1 INTRODUCTION	 1
1.1 Introduction	1
1.2 Definition of Network and Internationalization	3
1.3 Statement of the Problem	3
1.4 Research Objectives	4
1.5 Justifications for This Research	6
1.5.1 The world software Industry	8
1.5.2 Malaysia Information Technology Industry	11
1.5.3 Malaysia Software Industry	15
1.5.4 Multimedia Super Corridor	16
1.6 Organization of the thesis	17
 2 LITERATURE REVIEW	 18
2.1 Introduction	18
2.2 Product Life Cycle Theory	18
2.3 Stages Theory	19
2.4 Dunning's Electic View	23
2.5 SMEs, network and internationalization	24
2.6 Network Approach	25

2.7	Summary and Conceptual Framework	32
2.8	Propositions	36
2.9	Advantages and Disadvantages of data collection techniques	40
3	METHODS OF DATA COLLECTION AND ANALYSIS	43
3.1	Introduction	42
3.2	Methodology	42
3.3	Data Analysis	48
3.4	Conclusion	49
4	RESULTS AND ANALYSIS	51
4.1	Introduction	51
4.2	Background of the respondent firms	51
4.2.1	Respondent firm 1: Edusoft	51
4.2.2	Respondent firm 2: Infosoft	57
4.2.3	Respondent firm 3: Securesoft	67
4.2.4	Respondent firm 4: Batteryco	74
4.3	Internationalization process as manifested in their choice of foreign market and mode of entry	82
4.3.1	Initial internationalization intention	82
4.3.2	Choice of foreign market	83
4.3.3	Mode of entry	87
4.4	Network Relationships of SMEs and their impact on the SMEs international market development	93
4.5	Network Relationships of SMEs and their impact on the SMEs marketing related activities within the international market	100
4.6	Summary and Modified Conceptual Framework	104
5	CONCLUSION	105
5.1	Introduction	105
5.2	Theoretical Managerial Implications	107
5.3	Limitations and suggestions for future research.	108
5.4	Conclusion	109

REFERENCES	110
APPENDICES	117

LISTS OF TABLES

	Page
Table 1.1: Revenue lost to software piracy by region	11
Table 2.1: Comparison among other stages theory	22
Table 2.2: The impact of network relationships on firms' internationalization process	33
Table 2.3: Advantages and Disadvantages of Data Collection Techniques	40
Table 3.1: Case Firms' Summaries	47
Table 3.2: Case Firm's Internationalization Activities	48
Table 4.1: Income Statement and Balance Sheet of Edusoft	59
Table 4.2: Income Statement and Balance Sheet of Infosoft	60
Table 4.3: Income Statement and Balance Sheet of Securesoft	69
Table 4.4: Income Statement and Balance Sheet of Batteryco	75
Table 4.5: International Market Development Events Listing	94

LISTS OF FIGURES

	Page
Figure 2.1: A framework for Internationalization Process: Software Industry	35
Figure 4.1: Organization Chart of Edusoft	58
Figure 4.2: Organization Chart of Infosoft	63
Figure 4.3: Organization Chart of Securesoft	68
Figure 4.4: Organization Chart of Batteryco	80
Figure 4.5: A Modified Framework for Internationalization Process: Software Industry	104

LISTS OF ABBREVIATIONS

AFTA	Asian Free Trade Agreement
BAe	British Aerospace System
BCI	Battery Council International
BSA	Business Software Alliance
CEO	Chief Executive Officer
COO	Chief Operating Officer
EC	European Community
FDI	Foreign Direct Investment
GDP	Gross Domestic Production
IBMA	Independent Battery Manufacturers Association Incorporated
IIPA	International Intellectual Property Alliance
IPR	International Planning and Research
ISPs	Internet Service Providers
IT	Information Technology
JV	Joint Venture
KLCC	Kuala Lumpur City Centre
KLIA	Kuala Lumpur International Airport
MIDA	Malaysian Industrial Development Authority
MIS	Management Information System
MIT	Massachusetts Institute of Technology
MNC	Multi National Corporations
MOU	Memorandum of Understanding
MSC	Multimedia Super Corridor
NAFTA	North American Free Trade Agreement
NTT	Nippon Telegraph and Telephone
OEM	Original Equipment Manufacturing
PLC	Product Lift Cycle
R & D	Research and Development
SMEs	Small and Medium-sized Enterprises
TQM	Total Quality Control
UK	United Kingdoms
US	United States
YB	Yang Berhormat

CHAPTER 1

INTRODUCTION

1.1 Introduction

A global economy boom, unprecedented in modern economy is underway as the drive for efficiency, productivity, and open, unregulated markets sweeps the world. Powerful economic, technological, industrial, political, and demographic forces are converging to build the foundation of a new global economic order on which the structure of a one-world economic and market system will be built (Cateora and Graham, 1999)

Whether or not a Malaysian firm wants to participate directly in international business, it cannot escape the effect of the ever-increasing number of indigenous firms exporting, importing, or manufacturing or both abroad. Neither can they ignore the number of foreign-based firms operating in Malaysian markets, and the increasing number of competitors for global markets.

In the case of Malaysia, the implementation of AFTA (Asian Free Trade Agreement) in 2002 would mean that import barriers like import duty would eventually lower to between zero percent and five percent. Previously protected infant industries are no longer receiving protection from direct competition with foreign producers. Therefore, indigenous firms that focus their business in domestic market are forced to be internationally competitive. On the other hand, as the boundaries between Asian countries dissolve, foreign business opportunities are easily reached then ever. To take advantage of these opportunities, firms must be readily equipped with international

experience and the best way of gaining such experiences is to personally involve in it. Therefore, more and more Malaysian firms are striving to have an international presence.

However, when firms decide to explore international markets, they begin to face a lot of challenges that require them to make strategic decisions. These include:

- Which country to penetrate (market selection)?
- What channel to use (entry mode)?
- Where to locate a manufacturing facility?

Theories have been developed to answer the above questions by understanding the internationalization process of firms. They can be categorized in terms of location of manufacturing facility (Vernon, 1966), foreign investment decision (Dunning, 1977), managerial learning and increased foreign commitment (Johanson & Vahlne, 1977) and entrepreneurial characteristics (Reuber & Ficher, 1997; McDougall et al., 1994; Oviatt & McDougall, 1994; Reid, 1983 and Cavusgil, 1982).

The internationalization process of small firms can also be understood by examining it from a network perspective, which has become a dimension intensively explored lately (Johanson & Mattson, 1988; Axelsson & Johanson, 1992; Johanson & Vahlne, 1992; Coviello & Munro, 1997; Andersen, 1996 and Ellis, 2000). Therefore, the aim of this research is to examine how SMEs' networks affect its internationalization process in the

context of a developing nation. The case firms were selected from software development SME's with a Multi Super Corridor (MSC)¹ status.

1.2 Definition of Network and Internationalization

According to Sikorsi and Menkhoff(2000), a network may include local authorities, competitors, bankers or any other party that enables a firm to obtain its supplies, funding, technology, or other useful commodity to do business effectively. Therefore, for the purpose of this research, a network is defined as a firm's management team and employees' relation with customers, suppliers, competitors, government authorities, bankers, families, friends, or any other party that enables a firm to internationalize its business activities.

Internationalization is the process by which firms increase their awareness of the influence of international activities on their future, and establish and conduct transactions with firms from other countries (Beamish, 1997)

1.3 Statement of the problem

Businesses are becoming global in scope. Economic integrations are formed in every corner of the world, eliminating protections that firms once enjoyed. To become more competitive, firms are striving to make international presence that permits them to access to the broader consumers.

As compared to developed or industrialized nations, firms in developing countries are smaller in size, less established and having poorer image in the eyes of global

¹ Please refer to pg 16 for the description of what MSC is

consumers. In software industry for instance, major portion of the market share have been enjoyed by big players like IBM, BEA, Oracle, Sun and etc., which were from developed nation. IBM and BEA, each capturing 34 percent of the e-business software. Sun ranked third with 7 percent, followed by Oracle with 6 percent, Sybase with 4 percent, and Hewlett-Packard with 3 percent (zdnet.com, March 21, 2002). Small and medium sized software firms inevitably are facing a lot of barriers in grabbing international opportunities. Among the barriers include limited capital, scarce skilled worker, inferior image, and intense competition. Despite these barriers, some software firms have been found to be successful internationally by utilizing their network relationships with international players. According to Bonarcorsi (1992), SMEs are found to utilize the network to explore international opportunity more frequently to minimize their negative impact of their scarce resources.

Therefore, this study intends to look in detail how network relationships are utilized by these software SMEs to explore international opportunities. The findings of this study may be beneficial to other SMEs in developing countries which intend to internationalize their business. We are focusing on software industries due to its rapid growth in global market generally and in Malaysia specifically. Please refer to section 1.5 for further information on software industries in world market and Malaysian market.

1.4 Research Objectives

Empirical research (Vernon, 1966; Dunning, 1977; Johanson & Vahlne, 1977; Reuber & Ficher, 1997) shows that various internationalization models have provided useful

frameworks to analyze internationalization process, pattern and growth. However, to learn about internationalization process of SMEs, a network perspective seems to be a more useful concept since it is possible to overcome the problems of limited resources, experiences and credibility (sales track record).

Literature from the developed nations has repeatedly found that networks have an impact on internationalization pace, market selection and entry mode. A question arises whether networking has the same influence in the context of small firms in a developing nation. Therefore, this study intends to investigate the following research objectives and question, in the context of SMEs in a developing country:

General Objective: To investigate the impact of network relationships on SMEs internationalization Process

Specifically, we are going to scrutinize the internationalization process of SMEs in terms of their choice of foreign market and mode of entry, international market development and marketing-related activities within the international markets?

This research intended to achieve the following specific objectives:

Specific Objectives: a) To select randomly three software firms with MSC status and one manufacturing firm as case firms.

b) To analyze data gathered from the case firms by using pattern matching, explanation building, checklists and events listings analytical tools.

c) To find evidences from the analysis to confirm or disconfirm the prepositions.

This will be followed by the justification of this research through brief overview of the software industry in the world market and Malaysia. Then the MSC background is delineated for better understanding.

1.5 Justification for This Research

Today business activities are getting global in scope. Technology, research, capital, investment, production, marketing, distribution, and communications networks all have global dimensions. Every business must be prepared to compete in an increasingly interdependent global economic environment, and all businesspeople must be aware of the effects of these trends when managing a domestic firm that exports, or a multinational conglomerate. Even companies that do not operate in the international arena are affected to some degree by the success of the European Community, the export-led growth in South Korea, the revitalized Mexican economy, and the economic changes taking place in China.

More importantly, firms are forced to internationalize their business by external factors such as globalization of world economic and regional economic cooperation which have resulted in more intense competition. As the economy globalizes and boundaries dissolve, firms are no longer competing largely with national rivals but with firms across the world. A firm that fails to make a global profit may well go out of business.

Firms, be they in developed or developing nations, are striving to have an international presence. Technological changes, particularly in the space-shrinking technologies of transport and communication, help to make possible the internationalization of economic activity. Other factors that prompt and facilitate business to go international include:

- ❑ Increasing homogenization of many markets in distant countries.
- ❑ Increasing numbers of business executives and entrepreneurs exposed to international business.
- ❑ Increasingly available international financing opportunities
- ❑ Increasingly internationally mobile human capital.
- ❑ Regional economic integration such as AFTA, NAFTA, EC where trade barriers are reduced to the minimum.

Why do firms want to go international? According to Karagozoglu and Lindell (1998), it could be due to the following reasons:

- Global market opportunities are more promising than domestic market
- Inquiries from potential foreign buyers
- Insufficient domestic market volume to achieve competitive R & D

- Domestic market saturation
- Domestic competitors are internationalizing
- Threats from multinational firms
- Rapid technology development
- Critical knowledge and resources are not domestically available

From the above, it is clear that internationalization process has been taken place extensively by firms. Therefore, it is timely to study firms' internationalization process in this research. The following delineated further information on the development of software industry, to justify the study of this research in this particular industry.

1.5.1 The World Software Industry

The software industry is a remarkable engine of economic growth around the world and holds tremendous potential for the future. In the past several decades, this industry has grown from infancy to robust maturity, becoming one of the most significant sectors of the global economy, with spillover benefits extending to virtually every corner of the world economy.

According to estimates made by IDC, a market research firm, global sales of packaged software reached over \$118.4 billion in final sales in 1996, rising to \$135.4 billion in 1997. In the 61 countries covered by this report, the packaged software market reached \$117.2 billion in final sales in 1996, rising to \$133.9 billion in 1997. Retail sales for PC business software, an important segment of the overall software market, reached \$14.1